

Applic. No. 10/014,246

Amdt. dated December 3, 2004

Reply to Office action of October 14, 2004

Claim Amendments

This listing of the claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (currently amended): An installation for fabricating semiconductor products, comprising:

fabrication units performing etching processes, wet chemical processes, diffusion processes, and cleaning techniques and being configured to operate in a clean room having longitudinal inner walls;

a transport system including a portal crane installation for supplying the semiconductor products to said fabrication units, said portal crane installation being configured to extend across the entire clean room and including two parallel crane tracks disposed in an opposing fashion in a vicinity of said longitudinal inner walls, a holding device extendable in a vertical direction, a carrier including a rail guide, said carrier having longitudinal sides, said two parallel crane tracks extending above said fabrication units, said carrier extending transverse to said two parallel crane tracks, and said carrier having ends at said longitudinal sides movably mounted in said two parallel crane tracks;

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said portal crane installation including a bogie guided in
said rail guide;

said fabrication units being disposed in the clean room at
positions independent of said transport system;

said fabrication units and said transport system configured to
process semiconductor wafers; and

a transport container fixed to said bogie via said holding
device and movably mounted to said holding device such that
said transport container is guidable over said fabrication
units and is lowerable to said fabrication units.

Claim 2 (previously presented): The installation according to
claim 1, wherein said carrier includes bogies respectively
disposed at said ends of said carrier.

Claim 3 (original): The installation according to claim 2,
wherein each of said two parallel crane tracks includes a rail
guide for a respective one of said bogies.

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Claim 4 (original): The installation according to claim 1, including support pillars, said two parallel crane tracks being supported on said support pillars.

Claim 5 (original): The installation according to claim 1, wherein said transport container is movable along said carrier.

Claims 6 and 7 (cancelled)

Claim 8 (previously presented): The installation according to claim 1, wherein said portal crane installation includes a swivel mechanism disposed between said holding device and said transport container, said swivel mechanism moves said transport container horizontally relative to said holding device for fine positioning said transport container.

Claim 9 (original): The installation according to claim 1, including a numerical control system controlling a travel path of said transport container along said carrier.

Claim 10 (original): The installation according to claim 1, wherein said portal crane installation includes drives with respective encapsulations.

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Claim 11 (original): The installation according to claim 10, wherein said encapsulations are explosion-proof encapsulations.

Claim 12 (original): The installation according to claim 2, wherein said bogies have respective encapsulations.

Claim 13 (previously-presented): The installation according to claim 1, wherein said bogie has an encapsulation.

Claim 14 (original): The installation according to claim 2, wherein said two parallel crane tracks have contact surfaces in contact with said bogies, said contact surfaces and said bogies are formed of a wear-proof, non-outgassing material.

Claim 15 (previously presented): The installation according to claim 1, wherein said rail guide of said carrier has a contact surface in contact with said bogie, said contact surface and said bogie are formed of a wear-proof, non-outgassing material.

Claim 16 (original): The installation according to claim 1, including a central control system controlling said portal crane installation.

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Claims 17-19 (cancelled)

Claim 20 (original): The installation according to claim 1, wherein said portal crane installation includes a further carrier and a further transport container movably mounted to said further carrier, said further carrier moves on said two parallel crane tracks of said portal crane installation.

Claim 21 (original): The installation according to claim 20, wherein said carrier and said further carrier are individually movable in said portal crane installation.

Claim 22 (original): The installation according to claim 1, wherein said portal crane installation includes a further transport container, said transport container and said further transport container are movably mounted one behind another to said carrier.

Claim 23 (original): The installation according to claim 22, wherein said transport container and said further transport container are individually movable.

Claim 24 (cancelled)

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Claim 25 (currently amended): A plant for fabricating semiconductor products, comprising:

a clean room having longitudinal inner walls;

fabrication units performing etching processes, wet chemical processes, diffusion processes, and cleaning techniques and being disposed in said clean room;

a transport system including a portal crane installation for supplying the semiconductor products to said fabrication units, said portal crane installation being configured to extend across said entire clean room and including two parallel crane tracks disposed in an opposing fashion in a vicinity of said longitudinal inner walls, a holding device extendable in a vertical direction, a carrier including a rail guide, said carrier having longitudinal sides, said two parallel crane tracks extending above said fabrication units, said carrier extending transverse to said two parallel crane tracks, and said carrier having ends at said longitudinal sides movably mounted in said two parallel crane tracks;

said portal crane installation including a bogie guided in said rail guide;

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said fabrication units being disposed in said clean room at positions independent of said transport system;

said fabrication units and said transport system being configured to process semiconductor wafers; and

a transport container fixed to said bogie via said holding device and movably mounted to said holding device such that said transport container is guidable over said fabrication units and is lowerable to said fabrication units.